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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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CHAU, COREY P

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/757,012

Applicant(s)

AMIR ET AL.

Examiner

Corey P. Chau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 4-16, 20 and 22-29 is/are pending in the application.
- 4a) Of the above claim(s) 17-19 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-16 is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-8, 20, 22-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. This application contains claim 17-19 drawn to an invention nonelected with traverse in Paper No. 2/14/2004. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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3. Claims 1-2, 4, 6, 8, 20, and 22-29 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6757397 to Buecher et al. (hereafter as Buecher).

4. Regarding Claim 1, Buecher discloses a computer-implemented method for generating a gain adjust signal to establish an audio output level (Figs. 2 and 7; abstract), comprising:

receiving at least one person-microphone position signal representative of a position of a person relative to a microphone (Figs. 2 and 7; column 1, lines 13-44);

determining a gain adjust signal based at least in part on the person-microphone position signal (Figs. 2 and 7; column 3, line 24 to column 4, line 22; column 4, line 50 to column 5, line 14); and

using the gain adjust signal to establish the audio output level, wherein the gain adjust signal is determined based at least partially on at least one of: a distance from a person's mouth to a microphone, an orientation of a person's head relative to the microphone, and a head location relative to a direction of sensitivity of a microphone (Figs. 2-3 and 7; column 3, lines 24-62).

5. Regarding Claim 2, Buecher discloses the person-microphone position signal is derived from a video system (Figs. 2-7; column 3, lines 24-62).

6. Regarding Claim 4, Buecher discloses recording at least one calibration person-microphone position signal; recording at least one calibration audio level; and using the calibration signal and calibration level, generating at least one mapping (Figs. 2 and 7; column 3, lines 12-23).

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7. Regarding Claim 6, Buecher discloses a computer-implemented method for generating a gain adjust signal to establish an audio output level (Figs. 2 and 7; abstract), comprising:

receiving at least one person-microphone position signal representative of a position of a person relative to a microphone (Figs. 2 and 7; column 1, lines 13-44);

determining a gain adjust signal based at least in part on the person-microphone position signal (Figs. 2 and 7; column 3, line 24 to column 4, line 22; column 4, line 50 to column 5, line 14); and

using the gain adjust signal to establish the audio output level, wherein the person-microphone position signal is derived from a motion sensing system or an orientation sensing system (Figs. 2-3 and 7; abstract; column 3, line 24 to column 4, line 22; column 4, line 50 to column 5, line 14).

8. Regarding Claim 8, Buecher discloses the gain adjust signal is determined contemporaneously with a recording of the person (Figs. 2 and 7; column 3, line 24 to column 4, line 22; column 4, line 50 to column 5, line 14).

9. Regarding Claim 20, Buecher discloses an audio system, comprising:

at least one microphone electrically connected to at least one audio amplifier having at least one audio gain (Figs. 2 and 7);

at least one video camera configured to generate a video stream (Figs. 2 and 7); and

at least one processor receiving signals from the video camera and establishing the audio gain using the video stream (Figs. 2 and 7; column 2, lines

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6-12; column 3, line 24 to column 4, line 22; column 4, line 50 to column 5, line 14).

10. Regarding Claim 22, Buecher discloses the processor records at least one calibration person-microphone position signal and at least calibration one audio level, and uses the calibration signal and calibration level to generate at least one mapping useful in generating the gain adjust signal (Figs. 2 and 7; column 3, lines 12-23).

11. Regarding Claim 23, Buecher discloses a slow adjust filter using an audio stream to generate a slow gain adjust signal (Figs. 2 and 7; column 2, lines 6-12; column 3, line 24 to column 4, line 22; column 4, line 50 to column 5, line 14).

12. Regarding Claim 24, Buecher discloses an audio system, comprising:

at least one microphone electrically connected to at least one audio amplifier having at least one audio gain (Figs. 2 and 7);

at least one source of person-microphone position signals representative of at least one of the angle between the head of a person and the microphone, and a head location relative to a direction of sensitivity of the microphone (Figs. 2 and 7; column 2, lines 6-12; column 3, line 24 to column 4, line 22; column 4, line 50 to column 5, line 14); and

at least one processor receiving signals from the source and establishing the audio gain in response thereto (Figs. 2 and 7; column 2, lines 4-11; column 3, line 63 to column 2, line 22; column 4, line 50 to column 5, line 14).

13. Regarding Claim 25, Buecher discloses the source is a video camera (Figs. 2 and 7; column 3, lines 24-62).

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14. Regarding Claim 26, Buecher discloses the source is a motion sensing system of a laser system or a position sensing system or an orientation sensing system or a distance sensing system (Figs. 2 and 7; column 3, lines 24-62).

15. Regarding Claim 27, Buecher discloses a slow adjust filter using an audio stream to generate a slow gain adjust signal (Figs. 2 and 7; column 2, lines 6-12; column 3, line 24 to column 4, line 22; column 4, line 50 to column 5, line 14).

16. Regarding Claim 28, Buecher discloses the gain adjust signal is determined by selecting one of several microphone outputs based on head position (column 4, line 39 to column 5, line 14).

17. Regarding Claim 29, Buecher discloses the source is an illumination-based pupil detector or a face detector (Fig. 3; column 3, lines 24-62).

18. Claim 7 is rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication No. US 2002/0068537 to Shim et al. (hereafter as Shim).

19. Regarding Claim 7, Shim discloses a computer-implemented method for generating a gain adjust signal to establish an audio output level (Fig. 7), comprising: receiving at least one person-microphone position signal representative of a position of a person relative to a microphone (i.e. one or more distance sensors on a radiotelephone to estimate a distance between the sensor and some portion of the user or user's head)(Figs. 7 and 8); determining a gain adjust signal based at least in part on the person-microphone position signal (i.e. using signals from one or more proximity sensors associated with the

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radiotelephone device, the device determines if a radiotelephone user is within a selected proximity zone for the device. If the user is within the proximity zone, the system adjust the speaker volume control and/or the microphone gain control according to an estimated user-device distance)(abstract); and using the gain adjust signal to establish the audio output level, wherein the person-microphone position signal is derived from a laser system (i.e. the distance sensors include, but are not limited to, an infrared sensor, a photoelectric sensor, a sound reflection sensor, a capacitive sensor, and a temperature sensor)(page 1, paragraph 0005).

20. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by JP 05-183621 to Hisaki.

21. Regarding Claim 7, Hisaki discloses a computer-implemented method for generating a gain adjust signal to establish an audio output level (Fig. 2), comprising: receiving at least one person-microphone position signal representative of a position of a person relative to a microphone (i.e. measuring a distance between the transmitter and/or the receiver and a human body with a distance sensor)(abstract; page 2, paragraph 0017); determining a gain adjust signal based at least in part on the person-microphone position signal; and using the gain adjust signal to establish the audio output level (i.e. controlling the sound volume of the receiver or the input sensitivity of the transmitter in the response to the result of the measurement with a sound volume controller and/or an input sensitivity controller)(abstract; page 2, paragraphs 0016-0020), wherein the



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person-microphone position signal is derived from a laser system (i.e. infrared sensor 7)(page 2, paragraph 0015; page 3, paragraph 0025).

### ***Response to Arguments***

22. Applicant's arguments with respect to claim 1-2, 4-6, 8, 20, 22-29 have been considered but are moot in view of the new ground(s) of rejection.

23. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., claim 7 uses laser) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Claim 7 discloses "using the gain adjust signal to establish the audio output level, where the person-microphone position signal is derived from a **laser system**. Shim and Hisaki discloses transmitting an infrared signal, and using a sensor to measure signal strength of a reflected infrared signal. Applicant has not clearly defined "laser system" in the claim, therefore the Examiner is free to broadly interpret this term in any manner consistent with the term. See Shim, claim 8; Hisaki, pages 7 and 8.

24. With respect to Applicant's argument on page 11, stating that "the rejection swearing behind Shim et al. (which also establish a date of conception prior to newly relied-upon Matsuo) in fact present evidence in the form of testimony based on first hand knowledge of diligence, contrary to the allegation

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in the Office Action”, has been note. However, the Examiner maintains that evidence submitted is insufficient to establish diligence.

What is meant by diligence is brought out in *Christie v. Seybold*, 1893 C.D. 515, 64 O.G. 1650 (6th Cir. 1893). In patent law, an inventor is either diligent at a given time or he is not diligent; there are no degrees of diligence. An applicant may be diligent within the meaning of the patent law when he or she is doing nothing, if his or her lack of activity is excused. Note, however, that the record must set forth an explanation or excuse for the inactivity; the USPTO or courts will not speculate on possible explanations for delay or inactivity. See *In re Nelson*, 420 F.2d 1079, 164 USPQ 458 (CCPA 1970). Diligence must be judged on the basis of the particular facts in each case. See MPEP § 2138.06 for a detailed discussion of the diligence requirement for proving prior invention.

An applicant must account for the entire period during which diligence is required. *Gould v. Schawlow*, 363 F.2d 908, 919, 150 USPQ 634, 643 (CCPA 1966) (Merely stating that there were no weeks or months that the invention was not worked on is not enough.); *In re Harry*, 333 F.2d 920, 923, 142 USPQ 164, 166 (CCPA 1964) (statement that the subject matter “was diligently reduced to practice” is not a showing but a mere pleading). A 2-day period lacking activity has been held to be fatal. *In re Mulder*, 716 F.2d 1542, 1545, 219 USPQ 189, 193 (Fed. Cir. 1983) (37 CFR 1.131 issue); *Fitzgerald v. Arbib*, 268 F.2d 763, 766, 122 USPQ 530, 532 (CCPA 1959)(Less than 1 month of inactivity during critical period. Efforts to exploit an invention commercially do not constitute diligence in reducing it to practice. An actual reduction to practice in the case of a

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design for a three-dimensional article requires that it should be embodied in some structure other than a mere drawing.); Kendall v. Searles, 173 F.2d 986, 993, 81 USPQ 363, 369 (CCPA 1949) (Diligence requires that applicants must be specific as to dates and facts.). The period during which diligence

The Applicant must show diligence in the completion of the invention from the time just prior to the date of the reference continuously up to the date of the actual reduction to practice or up to the filing date of the application. The Applicant must show completion of the invention commensurate with the extent that the whole invention as claimed is shown by evidence. This evidence must include:

- 1) a statement of facts.
- 2) the facts must be shown in the form of sketches, blueprints, notebook entries, models, etc for the entire critical time period.
- 3) all acts relied upon must have occurred in this country or a NAFTA or WTO member country after the effective date of the Yang reference.

***Allowable Subject Matter***

25. Claims 9-16 allowed.
26. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

27. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Corey P. Chau whose telephone number is (571)272-7514. The examiner can normally be reached on Monday - Friday 9:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on (571)272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 23, 2006  
CPC



HUYEN LE  
PRIMARY EXAMINER